MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2021/2022

PPE0054 – BASIC MACROECONOMICS

(Foundation in Business)

12 AUGUST 2022
9.00 a.m. – 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **NINE** pages with 2 sections.
2. Answer **ALL** questions in **Section A** and **B**. The distribution of the marks for each section is given.
3. The answers for **Section A** should be shaded on the OMR sheet. The answers for **Section B** should be written in the Answer Booklet.

SECTION A: MULTIPLE CHOICE QUESTIONS [30 MARKS]

Instructions: Answer **ALL** questions in this section. Shade the answers on the **OMR** sheet.

1. In December 2019, currency was $400 billion, traveller's cheques were $5 billion; checkable deposits owned by individuals and businesses were $600 billion, saving deposits were $200 billion, time deposits were $1,500 billion; and money market funds were $1,200 billion. What was the M1 in December 2019?
   A. M1 = $405 billion
   B. M1 = $3500 billion
   C. M1 = $1,005 billion
   D. M1 = $3,005 billion

2. To function as money, something must hold its purchasing power over time. That is, it must be a _____.
   A. store of value
   B. unit of accounting
   C. medium of exchange
   D. standard of deferred payment

3. When the bank makes a loan, it _____.
   A. increases its reserves
   B. creates a checkable deposit
   C. decreases the quantity of money
   D. borrows the money from the central bank

4. Assume Riley deposits $4,000 cash in her checkable deposit at Finland Bank. If the required reserve ratio is 5 percent, Finland Bank's _____.
   A. excess reserves increase by $4,000
   B. liabilities do not change but its assets increase
   C. assets and its liabilities change in opposite directions
   D. required reserves increase by $200 and its excess reserves increase by $3,800

5. When the central bank buys government securities, _____.
   A. reserves increase, leading to a decrease in the money supply by an amount more than the purchase of the government securities.
   B. reserves decrease, leading to an increase in the money supply by an amount more than the purchase of the government securities.
   C. reserves increase, leading to an increase in the money supply by an amount more than the purchase of the government securities.
   D. reserves decrease, leading to a decrease in the money supply by an amount more than the purchase of the government securities.

Continued...

6. John gets paid monthly and pays for everything with cash. When he cashes his cheque, he keeps RM200 for food, RM100 for utilities, RM900 for rent, RM50 for transportation, RM100 for entertainment and RM300 for unexpected expenditures. Which of the following statements is **TRUE**?
   A. The transactions demand for money is RM1,350, the precautionary demand is RM300 and the asset demand is RM0.
   B. The transactions demand for money is RM450, the precautionary demand is RM300 and the asset demand is RM900.
   C. The transactions demand for money is RM350, the precautionary demand is RM1,150 and the asset demand is RM150.
   D. The transactions demand for money is RM350, the precautionary demand is RM950 and the asset demand is RM0.

7. An excess quantity of money supplied will _____.
   A. decrease income
   B. raise bond prices
   C. raise interest rates
   D. decrease investment

8. If the central bank increases the reserve requirement ratio, the _____.
   A. money supply increases, and the money supply curve shifts to the left
   B. money supply decreases, and the money supply curve shifts to the left
   C. money supply increases, and the money supply curve shifts to the right
   D. money supply decreases, and the money supply curve shifts to the right

9. Because the inflation rate is so high, Adriana refuses to carry cash. Even though it is a bother, she now goes to the ATM twice as often to get the cash she needs. Adriana's actions are an example of the _____.
   A. menu costs of inflation
   B. confusion costs of inflation
   C. uncertainty costs of inflation
   D. shoe-leather costs of inflation

10. You agree to lend $1,000 for one year at a nominal interest rate of 10%. You anticipate that inflation will be 4% over that year. If inflation is instead 3% over that year, which of the following is **TRUE**?
    A. The real interest rate you earn on your money will be negative.
    B. The real interest rate you earn on your money is lower than you expected.
    C. The purchasing power of the money that will be repaid to you will be lower than you expected.
    D. The person who borrowed the $1,000 will be worse off as a result of the unanticipated decrease in inflation.

Continued...

11. You lend RM5,000 to a friend for one year at a nominal interest rate of 10%. The CPI over that year rises from 180 to 190. What is the real rate of interest you will earn?
    A. 0%
    B. 4.4%
    C. 5.5%
    D. 5.8%

12. Which of the following is an example of a worker experiencing frictional unemployment?
    A. A Firefly pilot loses his job because of lack of demand for air travel.
    B. An employee is laid off because the economy is suffering a recession.
    C. A worker quits his job at the Post Office to find more interesting work.
    D. A computer programmer loses her job because it is outsourced to India.

13. An increase in cyclical unemployment will result in _____.
    A. a decrease in frictional unemployment
    B. an increase in the unemployment rate
    C. an increase in structural unemployment
    D. an increase in the natural rate of unemployment

14. If the working age population _____ and the labour force does not change, the _____.
    A. increases; unemployment rate will increase
    B. decreases; unemployment rate will increase
    C. increases; labour force participation rate will increase
    D. increases; labour force participation rate will decrease

15. If aggregate demand decreases, the _____.
    A. short-run Phillips curve shifts leftward
    B. short-run Phillips curve shifts rightward
    C. economy moves to a lower inflation rate along its short-run Phillips curve
    D. economy moves to a higher inflation rate along its short-run Phillips curve

16. When a country imports a good, the _____ to consumers is _____ the _____ to producers.
    A. gain; larger than; loss
    B. loss; larger than; gain
    C. loss; smaller than; gain
    D. gain; smaller than; loss

17. Which of the following group is hurt by a tariff?
    A. foreign government
    B. domestic government
    C. domestic producers of the good
    D. domestic consumers of the good

Continued...

18. Assume that China has a comparative advantage in producing corn and exports corn to Japan. We can conclude that _____.
    A. labour costs are higher for corn producers in Japan than in China
    B. China has a lower opportunity cost of producing corn relative to Japan
    C. Japan has an absolute disadvantage in producing corn relative to China
    D. China also has an absolute advantage in producing corn relative to Japan

19. With no international trade, the Canada price of wheat is lower than the world price of wheat. This indicates that Canada _____ a comparative advantage in the production of wheat and with international trade, Canada will _____ wheat.
    A. has; export
    B. has; import
    C. might have; export
    D. does not have; export

20. If the world price of a good is below the no-trade domestic price, a country _____.
    A. will benefit from exporting the good
    B. will benefit from importing the good
    C. will not engage in trade for that good
    D. has a comparative advantage in the production of that good

21. Based on the following option, who gains from international trade?
    A. Only the exporting nation
    B. Only the importing nation
    C. Both the importing and the exporting nations
    D. The gains depend on which nation gets to keep the total revenue from the sale

22. Which of the following would decrease the current account balance of the United States?
    A. A decrease in imports
    B. A decrease in the amount of money the U.S. government sends in foreign aid to other countries
    C. A decrease in the balance of trade
    D. A decrease in the amount of income U.S. companies pay out to foreigners who own investments in the U.S

23. If the current account balance is negative, net interest is RM100 billion and net transfer is -RM100 billion, then _____.
    A. exports exceed imports
    B. imports exceed exports
    C. the official settlements account must be positive
    D. the official settlements account must be negative

Continued...

24. The U.S. capital account balance is equal to _____.
    A. foreign investment in the United States minus U.S. investment abroad
    B. U.S. investment abroad minus foreign investment in the United States
    C. foreign assets owned by the United States minus U.S. assets owned by foreigners
    D. the value of exports of U.S. capital goods minus the value of imports of capital goods into the United States

25. When the U.S. official reserves _____, the official settlements account balance becomes negative and when the U.S. official reserves _____, the official settlements account balance becomes positive.
    A. increase; increase
    B. decrease; increase
    C. increase; decrease
    D. decrease; decrease

26. A persistent shortage of yen at a given fixed exchange rate (in dollars per yen) is evidence that the yen is _____ versus the dollar. This shortage can be reduced or eliminated through a _____ of the yen.
    A. undervalued; devaluation
    B. undervalued; revaluation
    C. overvalued; revaluation
    D. overvalued; devaluation

27. If the exchange rate changes from 1.00 euro per dollar to 1.10 euros per dollar, the euro has _____.
    A. depreciated against the euro
    B. appreciated against the euro
    C. appreciated against the dollar
    D. depreciated against the dollar

28. On the foreign exchange market, an increase in a country's exchange rate _____.
    A. decreases the demand for its currency and shifts the demand curve leftward
    B. decreases the demand for its currency and shifts the demand curve rightward
    C. decreases the quantity demanded for its currency and leads to an upward movement along the demand curve
    D. increases the quantity demanded for its currency and leads to a downward movement along the demand curve

29. When the U.S. interest rate _____ relative to foreign interest rates, the supply of dollars _____ and the supply curve of dollars shifts rightward.
    A. falls; increases
    B. rises; increases
    C. falls; decreases
    D. rises; decreases

Continued...

30. When the economy experiences a balance of payments surplus, the central bank must _____ to maintain the exchange rate.
    A. buy foreign currency
    B. sell bonds
    C. buy home currency
    D. sell foreign currency

SECTION B: STRUCTURED QUESTIONS [70 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the Answer Booklet.

Question 1

Part A

Suppose the central bank purchased RM200,000 of government bonds from you. Assume that you deposited the RM200,000 in Bank of Finance.

a) Show this transaction on Bank of Finance's balance sheet.

(1.5 marks)

b) After depositing RM200,000, but before any other actions,
    i. how much is the bank's required reserves and excess reserves if the required reserve ratio is 10 percent.

(4 marks)

    ii. what is the maximum amount of loan that can be given out by Bank of Finance from this deposit?

(1.5 marks)

    iii. show Bank of Finance new balance sheet if the bank loan out as much as they can.

(2 marks)

c) After infinite rounds of depositing and lending, what is the maximum increase in money supply from the central bank's action?

(2 marks)

d) If during the rounds of depositing and lending, some people keep extra currency and fail to deposit all of their receipts, will there be more or less money created from the central bank's action than you found in part (d)? Why?

(1 mark)

Part B

a) Use the money demand and money supply model to show the money market is in equilibrium with nominal interest rate of 5 percent and the quantity of money of $800 billion.

(4 marks)

b) Suppose the central bank increases the money supply to $850 billion.
    i. Show the increase in money supply in the diagram drawn in (a)

(1 mark)

Continued...

ii. If the nominal interest rate remains at 5 percent, will households and firms now be holding more money or less money than they want to hold, and will they be buying or selling short-term financial assets? Explain what will happen to the equilibrium nominal interest rate

(3 marks)

[TOTAL 20 MARKS]

Question 2

a) Fill in the missing values in ***Exhibit 1*** that shows data collected in the household survey for December, 2019. The working-age population, employment, unemployment, and labor force are measured in thousands. Show your work.

Working-age population	
Employment	
Unemployment	
Unemployment rate	5.4%
Labour force	135,113
Labour force participation rate	67.0%

Exhibit 1

(9 marks)

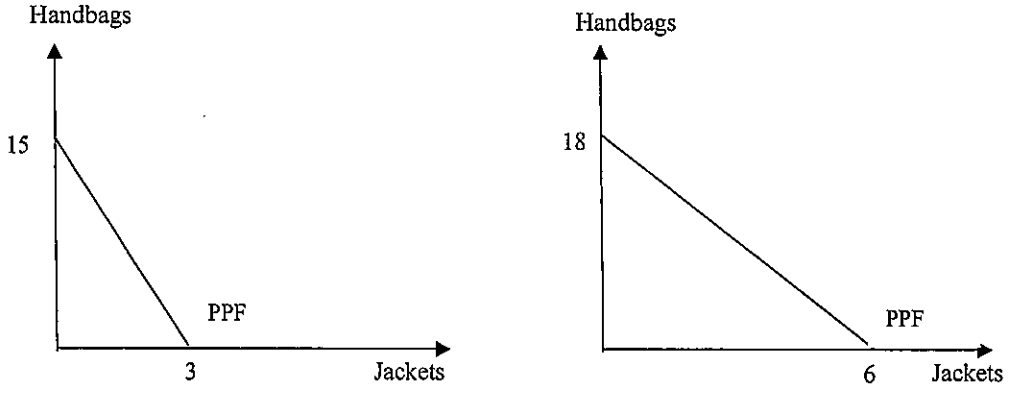
b) Suppose that Beckham take out a loan at the bank for $100,000 and is required to pay it back with interest of $10,000 at the end of the year. Suppose that there was no inflation at all when he took out the loan. However, assume that by the end of the year, the price index has increased from 100 to 106. Calculate both the nominal interest rate and the real interest rate on this simple loan arrangement.

(6 marks)

[TOTAL 15 MARKS]

Question 3

Consider two countries, Cambodia and Thailand, each capable of producing handbags and jackets. Assume that for each labour employed, the production possibilities frontiers (PPF) for these two countries are as shown in ***Exhibit 2***



Cambodia *Thailand*

Exhibit 2

Continued...

a) What is the opportunity cost of producing each handbag in each country?
(3 marks)

b) What is the opportunity cost of producing each jacket in each country?
(3 marks)

c) Which country has a comparative advantage in handbag's production? Which country has a comparative advantage in jacket's production? Briefly explain.
(3 marks)

d) Suppose each country has 5,000 workers. Currently, each country devotes 40 percent of its labour force to handbag's production and 60 percent to jacket's production. What is the output of handbags and jackets produced by each country?
(2 marks)

e) Suppose each country specialises in the production of the good in which it has a comparative advantage. What is the number of handbags and jackets produced by the two countries?
(2 marks)

f) Suppose both countries specialise in a good for which they have the comparative advantage and trade 8,000 jackets for 42,000 handbags. What would be the consumption bundles of handbags and jackets after trade for both countries?
(2 marks)

[TOTAL 15 MARKS]

Question 4

Part A

Exhibit 3 describes the economy of U.S. in year 2020.

Item	$ amount (billion)
Merchandise exports	400
Services (exports)	80
U.S. investment abroad	33
Statistical discrepancy	- 29
Income from U.S. assets abroad	15
Foreign investment in the U.S.	50
Increase in U.S. official reserve assets	5
Income from foreign assets in U.S.	20
Decrease in foreign official reserve assets in the U.S.	4
Merchandise imports	410
Services (imports)	34
Net unilateral transfers	-18

Exhibit 3

Based on ***Exhibit 3***, calculate

a) merchandise trade balance.
(1.5 marks)

b) current account balance.
(4 marks)

c) capital account balance.
(1.5 marks)

Continued...

d) the official reserve balance.

(1.5 marks)

e) balance of payments.

(2.5 marks)

Part B

a) Graph the supply and demand for the foreign exchange market, expressed in terms of Malaysian ringgit per U.S dollar. Show the equilibrium exchange rate at RM4 per dollar.

(3 marks)

b) Suppose that now the exchange rate between ringgit and dollar is fixed at RM3.80 per dollar. Show this fixed exchange rate in the diagram drawn in part (a).

(2 marks)

c) Based on (b),

i) has ringgit overvalued or undervalued?

(1 mark)

ii) what would happen to balance of payments of Malaysia?

(1 mark)

iii) if Malaysia wish to maintain the fixed exchange rate, will the central bank of Malaysia need to buy dollar in exchange of ringgit or sell dollar in exchange for ringgit?

(1 mark)

iv) what would happen to Malaysia's international reserves if the fixed exchange rate is maintained at RM3.80 per dollar?

(1 mark)

[TOTAL 20 MARKS]

End of Paper